

REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. Claims 9-11, 16, and 18-21 are pending. Claims 9, 10, and 16 are amended.

Claims 9 and 16 are amended to recite that the electrical control unit is able to alter the vibration frequency of the hollow damping body such that different vibration frequencies can be damped. Claims 9 and 16 patentably define over the prior art. Neither Yamada nor Pohl taken alone or in combination discloses or suggests that the electrical control unit is able to alter the vibration frequency of the hollow damping body such that different vibration frequencies can be damped. By contrast, Yamada discloses that after actuation of the damper 7, which makes the damper mass 8 swingable, damping for only one frequency is achieved. That is, the device of Yamada is set fixedly to one and only one damping frequency. After actuation of the damper 7, the vibration frequency of the damper 7 cannot be changed such that different vibration frequencies can be damped based.

Pohl discloses several damper elements units 110, 111, and 112. Each damper element contains electrorheological fluid and a piston movable in the fluid. The piston extends from the damper element and attaches to a vibratory mass 11. A spring is coupled between a respective damper element and the reference mass 12. The damper element of Pohl does not have any vibration frequency that could be altered to damp a

vibration of a steering wheel. The necessary restoring force for the vibration damping device is generated in Pohl by the spring coupled externally to the damper element, and not by the damper element. The damper element itself does not have any element able to perform a vibration and therefore, cannot have a vibration frequency that can be altered. The damper element simply functions to make a rigid or damped coupling of the spring 17 or 18 to the vibratory mass 11 by increasing or decreasing the resistance for the piston 33 moving through the electrorheological fluid.

By contrast, the absorber mass 113 in Pohl is used to absorb particular mechanical vibrations of the system. An auxiliary mass 114 is used to shift the resonant or natural frequency of the vibration of the absorber mass 113 (See paragraphs 11 and 34 of PG Pub application No. 2002/0185347).

Also, Neither Yamada nor Pohl taken alone or in combination discloses or suggests a mass core acting as an attenuation mass arranged inside said hollow damping body. Regarding Pohl, Pohl fails to disclose that the piston 33 of Pohl is a mass core that acts as an attenuation mass. Pohl only discloses that the piston 33 is used to couple the spring 17 or 18 to the vibratory mass 11. Pohl does disclose absorber and auxiliary masses 113, 114 and vibratory and reference masses 11, 12 that act to reduce the mechanical vibrations. However, each of these masses is larger than the damper element and is arranged outside of the damper element. As acknowledged by the examiner, Yamada does not disclose a

rocking. By contrast, the damper element of Pohl is designed to be permanently attached to the masses and not rock. Hence,

is therefore allowable as depending from an allowable claim and for the specific features recited therein.

Claim 10 is amended in independent form to include all of the limitations of amended claim 9. Claim 10 should be allowed based on the reasons for claim 9 and also for the additional feature that the hollow damping body is made of an elastic material. Neither Yamada nor Pohl disclose or suggest a hollow damping body that is made of an elastic material. For the proper functioning of the damper element of Pohl, the outer housing of the damper element must be rigid. Otherwise, the resistance of the electrorheological fluid to the movement of the piston could not be adjusted with any precision to tune the damping. Also, the hatching on drawings of Pohl indicate that the material is metal, which is generally rigid. Therefore, claim 10 is allowable.

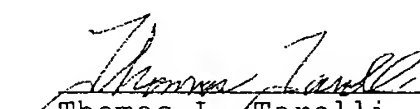
New claim 22, which depends from claim 16, should be allowed for the same reasons as claim 16 and also for the additional feature that the mass core is entirely surrounded by said one of an electrorheological fluid and a magnetorheological fluid. Neither Yamada nor Pohl taken alone or in combination disclose or suggest this feature. Therefore, claim 22 is allowable.

New claim 23, which depends from claim 9, should be allowed for the same reasons as claim 9 and also for the additional feature that the mass core is entirely arranged inside the hollow damping body. Neither Yamada nor Pohl taken alone or in combination disclose or suggest this feature. Therefore, claim 23 is allowable.

In view of the foregoing, it is respectfully submitted that the above-identified patent application is in condition for allowance, and allowance of the above-identified patent application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

  
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